REMARKS

An RCE and three month suspension of time were filed in the present application on February 16, 2010, which requested entry of the response filed January 19, 2010. Based on the remarks in the Advisory Action of February 2, 2010, Applicant understands that the rejections based on RIVERS, SUGIKAWA, and TAMURA have been withdrawn.

Accordingly, the present Amendment, which is believed to require further consideration and/search, responds to the sole rejection maintained in the Advisory Action of February 2, 2010, i.e., based on KAWAKAMI '922 and KAWAKAMI '901.

The application is amended in a manner to place it in condition for allowance.

Status of the Claims

Claim 1 is amended. Support for the amendment may be found, for example, in the last paragraph of page 7, the last paragraph of page 8 of the present specification, page 10, lines 17-23 and page 12, lines 7-28.

Claims 1-3, 5 and 6 remain in this application.

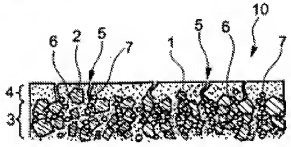
Claim Rejections-35 USC §102

Claims 1, 2, 5 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by KAWAKAMI et al. JP 08-050922A

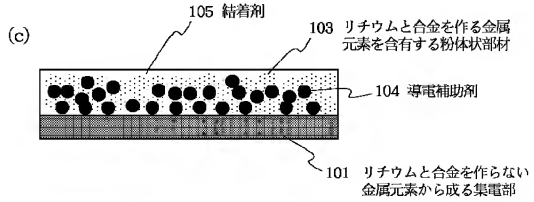
(KAWAKAMI '922). This rejection is respectfully traversed for the reasons below.

Figure 1 of the present specification illustrates the collecting surface layer (item 4), the active material layer (item 3), the active material particles (items 2), the voids (item 6), and the microvoids (item 5):

Fig.1

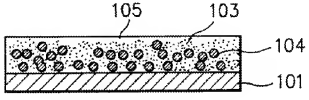


KAWAKAMI '922 was offered for teaching anode comprising an active layer interposed between two layers, and the active layer is capable of forming lithium compounds. KAWAKAMI '922 teaches the following in the Japanese application Figure 2:



This is the same as the Figure 4(c) U.S. Patent 6,051,340 which was discussed previously:

FIG. 4(c)



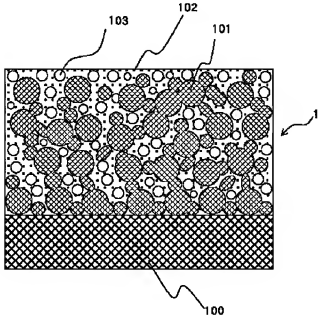
In these figures, item 101 is a metal layer, item 104 represents an electrically conductive auxiliary, item 103 represents powdered material, and item 105 represents a binding agent.

There is no suggestion of the recited structure, i.e., having a pair of current collecting surface layers of which the surfaces are adapted to be brought into contact with an electrolytic solution, the current collecting surface layers having a thickness of 0.3 to 10μm, at least one active material layer interposed between the surface layers, and microvoids being open on the surface of the current collecting surface layers, extending in the thickness direction of the current collecting surface layers, and leading to the active material layer so as to provide fluid communication between the surface of the collecting surface layers and the active material.

Therefore, KAWAKAMI '922 fails to anticipate or render obvious the claimed invention.

Claims 1-3, 5 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by KAWAKAMI et al. JP 8171901 (KAWAKAMI '901). This rejection is respectfully traversed for the reasons below.

KAWAKAMI '901 discloses a negative electrode for a secondary battery, e.g., as shown in Figure 1 below:



The negative electrode has an electro-conductive material 101 and an insulating or semiconductor material 102. The insulating or semiconductor material 102 allows an ion which participates in the electrode reaction to pass. However, the insulating or semiconductor material 102 does not allow an active material which is deposited on the negative electrode in the course of charging to pass.

The layer located on the current collector 100 of KAWAKAMI '901 has the electro-conductive material 101, the insulating or semiconductor material 102 and voids. The electro-conductive material 101 is in a particulate form, fibrous form or a mixture thereof. The electro-conductive material 101 is made of nickel, titanium, copper, aluminum, platinum, palladium, an alloy consisting of these metals, stainless steel, carbon or graphite. The insulating or semiconductor material 102 is made of a macrocyclic material, a material having an aromatic moiety, a polymeric material containing fluorine, a material having an ether moiety, a material having a carbonyl moiety, a material having a double bond of phosphorus and nitrogen, or a glassy metal oxide.

The negative electrode of KAWAKAMI '901 is prepared by coating a liquid containing the electro-conductive material 101 and insulating or semiconductor material 102 on a surface of the current collector 100, followed by allowing the coating layer to dry.

KAWAKAMI '901 fails to disclose or suggest at least the following features of the claimed invention:

- a current collecting surface layer present over the whole thickness of the active material layer,
- a current collecting surface layer having a thickness of 0.3 to 10μm, and

- microvoids open on the surface of the current collecting surface layers, extending in the thickness direction of the current collecting surface layers, and leading to an active material layer so as to provide fluid communication between the surface of the collecting surface layers and the active material.

Therefore, the claimed invention is neither anticipated by nor rendered obvious over KAWAKAMI '901.

Conclusion

In view of the amendment to the claims and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our credit card which is being paid online simultaneously herewith for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Robert A. Madsen/
Robert A. Madsen, Reg. No. 58,543
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

RAM/lrs